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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,101	04/21/2005	Heon-Sang Ahn	P27779	3930

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GREENBLUM & BERNSTEIN, P.L.C.  
1950 ROLAND CLARKE PLACE  
RESTON, VA 20191

EXAMINER
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BASICHAS, ALFRED

ART UNIT	PAPER NUMBER
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3749

NOTIFICATION DATE	DELIVERY MODE
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05/16/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
pto@gbpatent.com

**Office Action Summary**

Application No.

10/532,101

Applicant(s)

AHN, HEON-SANG

Examiner

Alfred Basichas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date: _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1, 2, 4, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolter (US2003/0129559) in view of Valentino (5,673,802) and Carpenter (6,554,448). Wolter discloses substantially all of the claimed limitations including, among other things,

1. A cake decorating device, comprising: a base 5, 12 on a cake 2; a heating unit 16 mounted to the base to emit heat (inherent that a candle will emit heat); and display provided on a vertical wall of the base and including a previously printed message (see at least figs. 5 and 6).

2. The cake decorating device as defined in claim 1, wherein the heating unit comprises a support plate 5 mounted to an upper surface of the base 12; at least

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one candlestick (see bottom of candle 16) provided on the support plate; and a candle 16 placed on the candlesticks.

4. The cake decorating device as defined in claim 1, wherein the heating unit comprises a base 5 having a plurality of locking holes 16a thereon; at least one candlestick 16 having a locking pin (see bottom of candle 16) at a lower surface thereof to be fitted into each of the locking holes of the base; and a candle placed on the candlestick.

5. The cake decorating device as defined in claim 1, wherein the heating unit comprises a plurality of candlesticks each provided with a candle, and adhered onto an upper surface of the base.

**Nevertheless, Wolter does not specifically recite:**

having a support pin at a lower surface thereof to be pinned, **thermosensitive**, wherein heat emitted from the heating unit causes a color change of the message, such that said display displays the message

a. As regards the support pins, Valentino teaches a cake decorating device including pins 46 that extend into the cake and thereby provide a firm and stable attachment thereof. Accordingly, it would have been obvious to one having ordinary skill in the art at the time of invention to incorporate Valentino's teaching of pins into the invention disclosed by Wolter, so as to provide for a firm and stable attachment thereof.

b. As regards thermosensitive color change, Carpenter teaches a thermosensitive (i.e., thermochromatic) message that changes color from the heat of a candle 25 so as to provide an esthetically pleasing display (see at least col. 8, lines 3-34). Accordingly, it would have been obvious to one having ordinary skill in the art at the time of invention to incorporate Carpenter's teaching of a color changing thermosensitive message into the invention disclosed by Wolter, so as to provide an esthetically pleasing display.

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4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wolter (US2003/0129559) in view of Valentino (5,673,802) and Carpenter (6,554,448). Wolter discloses substantially all of the claimed limitations

3. The cake decorating device as defined in claim 1, wherein the heating unit comprises a base having a rail groove thereon; at least one candlesticks having a locking part at a lower surface thereof to be fitted into the rail groove of the base; and a candle placed on the candlesticks.

Official Notice is given that claimed attachment arrangements are old and well known in the art. Such an arrangement has the clear and obvious benefit of providing for efficient attachment of various components. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the claimed attachments into the invention disclosed by Wolter, so as to provide for efficient attachment member.

5. Claims 6, 7, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolter (US2003/0129559) in view of Valentino (5,673,802) and Carpenter (6,554,448), and further in view of Zer (5,860,725). The combination of Wolter, Valentino, and Carpenter teach substantially all of the claimed limitations, but does not specifically recite:

6. The cake decorating device as defined in claim 1, wherein the heating unit comprises a candle-receiving chamber integrated with the base; and a candle having a plurality of candlewicks and received in the candle-receiving chamber.

7. The cake decorating device as defined in claim 1, wherein the heating unit comprises a candle-receiving chamber provided on an upper surface of the base; and a candle having a plurality of candlewicks and received in the candle-receiving chamber.

c. As regards integral components, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated integral components in the invention disclosed by Wolter, since it

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has been held that where constituent parts are combined so as to constitute a unitary whole, the unitary whole is deemed integral. *In re Larson*, 144 USPQ 347.

d. As regards a plurality of wicks, Zer teaches a candle 50 utilized in a heat responsive display including a plurality of wicks 52,54,56. Zer teaches that such an arrangement is beneficial by providing for different burning lives in order to allow for the desired effect. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a plurality of wicks as taught by Zer into the invention taught by the above combination, so as to provide for the desired effect.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wolter (US2003/0129559) in view of Valentino (5,673,802) and Carpenter (6,554,448), which combination teaches substantially all of the claimed limitations, but does not specifically recite:

8. The cake decorating device as defined in claim 1, wherein the displaying unit comprises a transfer paper printed by a thermosensitive microcapsule product.

While the reference may be silent as to how the apparatus is manufactured, the prior art apparatus appears to be the same as claimed. This product-by-process limitation would not be expected to impart distinctive structural characteristics to the apparatus.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized any process including that which is recited in the claims to have produced the print.

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7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Valentino (5,673,802) in view of Carpenter (6,554,448). Valentino discloses substantially all of the claimed limitations including, among other things, a base 42, support pins 48, locking groove 56 (see at least fig. 1), locking protrusion 54 on support plate 40 (see at least col. 3, line 65 – col. 4, line 16), and a heating unit on the upper surface of the support plate (candles placed in candle holders 52). Nevertheless, Valentino fails to disclose a thermosensitive message. Carpenter teaches a thermosensitive (i.e., thermochromatic) message that changes color from the heat of a candle 25 so as to provide an esthetically pleasing display (see at least col. 8, lines 3-34). Accordingly, it would have been obvious to one having ordinary skill in the art at the time of invention to incorporate Carpenter's teaching of a color changing thermosensitive message into the invention disclosed by Valentino, so as to provide an esthetically pleasing display.

### ***Response to Arguments***

8. Applicant's arguments with respect to the claim have been considered but are not found persuasive.

e. In response to applicant's argument that the combination of Wolter and Carpenter fails to make obvious the claimed limitation because there is no evidence that the candles of Wolter are of the type to effect a color change in Carpenter, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all

of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

f. As regards the issue of integral components, applicant asserts that the examiner has failed to establish a prima facie case of obviousness because the examiner has not provided factual evidence to support the assertion. The examiner asserts that no such additional evidence is required to establish the aforementioned rejection.

g. Applicant further asserts that with regard to claim 8 the examiner's rejection is faulty because not all of the words in the claim have been considered. The examiner assures applicant that all of the words of the claims have been considered. As such, applicant is reminded that the words at issue recite a product by process limitation, which was addressed accordingly.

h. As regards applicant's challenge to the official notice taken by the examiner of the rail groove arrangement as a means of attaching the candle sticks to the base, the examiner cites Greenvurcel (5,207,571). As the reference appears to speak for itself, no further comment is deemed necessary.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alfred Basichas whose telephone number is 571 272




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4871. The examiner can normally be reached on Monday through Friday during regular business hours.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center telephone number is 571 272 3700.

May 4, 2007



Alfred Basichas  
Primary Examiner